

Algebra I

8.4 Classwork

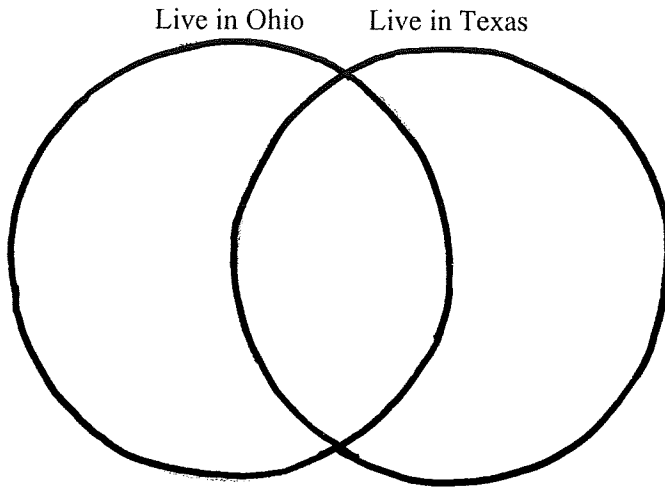
Defining Union and Intersection

NAME: _____

DATE: _____ HOUR: _____

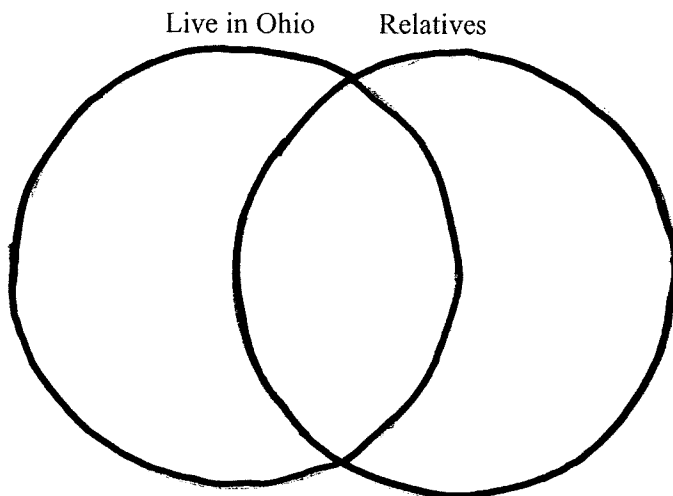
Read pages 376-377 in your textbook. For 1-9, refer to the database on the top of page 377.

1. Complete the Venn Diagram below with LAST NAMES.



2. How many people in the database live in Ohio? _____
3. How many people in the database live in Texas? _____
4. How many people in the database live in Ohio OR Texas? _____
5. How many people in the database live in Ohio AND Texas? _____

6. Complete the Venn Diagram below with LAST NAMES.



7. How many people in the database are relatives? _____
8. How many people in the database live in Ohio OR are relatives? _____
9. How many people in the database live in Ohio AND are relatives? _____

For 10-19, use set $A = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15\}$

10. Describe set A. _____
 11. List the elements of set A that are odd integers. _____
 12. List the elements of set A that are even integers. _____
 13. What is the **intersection** of the odd and even integers of set A? _____
 14. What is the **union** of the odd and even integers of set A? _____
 15. List the elements of set A that are **multiplies of 5**. _____
 16. List the elements of set A that are **multiplies of 5 AND odd**. _____
 17. List the elements of set A that are **multiplies of 5 OR odd**.

 18. List the elements of set A that are **multiplies of 2 AND odd**. _____
 19. List the elements of set A that are **multiplies of 4 OR odd**.

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For 20-29, use set $B = \{3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16\}$

20. Describe set B. _____
 21. List the elements of set B that are odd integers. _____
 22. List the elements of set B that are even integers. _____
 23. What is the **intersection** of the odd and even integers of set B? _____
 24. What is the **union** of the odd and even integers of set B? _____
 25. List the elements of set B that are **multiplies of 4**. _____
 26. List the elements of set B that are **multiplies of 4 AND odd**. _____
 27. List the elements of set B that are **multiplies of 4 OR odd**.

 28. List the elements of set B that are **multiplies of 3 AND odd**. _____
 29. List the elements of set B that are **multiplies of 3 OR odd**.

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